

Addax Goes for the Gold



The most significant changes to protect human health and the environment can come about by changing the

chemicals and other materials used in a process. Addax Composites, a subsidiary of Rexnord Corporation, demonstrated these truths when it shifted to less toxic materials in many of its operations.

Addax Composites manufactures and assembles drive shafts and rollers. In 2000, Addax switched from a chlorinated solvent to less toxic materials in parts cleaning operations. Operating under a contract with Saf-T-Kleen Corporation, Addax upgraded its service from Bronze level to Gold level, significantly

improving its operations. The company switched to Rustlick, a water-based product and Core Synthetic, a nontoxic cutting oil to lubricate drills and other machines.



Addax has reduced toxics in the sanding and painting operations by repeatedly filtering the water used for dust suppression and wet sanding. This activity reuses the water, reduces water consumption, and reduces the amount of water sent to the city's Theresa Street Treatment Plant.

Addax Composites recovers over 50% of the acetone used in the parts cleaning operations. This acetone is distilled, removing



impurities, and then is reused. This practice cuts down the need to purchase additional acetone (reducing the volume of hazardous materials stored on site). Fewer Volatile Organic Compounds (VOCs) are released into the air.

About twice a year, Addax recycles steel chips and other material from drilling and cutting processes. Addax can now dispose most waste as nonhazardous. The company has reduced costs by around fifteen thousand dollars in a ten-month period while helping the environment.



Addax Composites Operation has shown an eagerness to explore and implement more environmentally conscientious behaviors in its processes. The company has created a clean, healthy, and

safe environment for its employees as well as for all residents of Lincoln. Addax Composites Operation daily demonstrates its dedication to reducing waste, preventing pollution before it starts, and protecting human health.

For more information, contact Ross Parde, at Addax Composites, 325-5005.



Please circulate this issue among your staff and coworkers.

Wipe Out Mosquitoes

LEON R. MARQUART, REHS

Mosquitoes love water. All mosquitoes, including the genus *Culex* which carries the West Nile Virus (WNV), need moisture to breed. One way to control the number of mosquitoes that interfere with work and play is to control or eliminate standing water. Other factors, including the clothes you wear and the insect repellent you use, can reduce the irritation of mosquito bites and the threat of WNV.

Business managers, and homeowners, can help by eliminating the places that collect water or trap moisture: barrels, buckets, old tires, plastic covers, formed scrap metal, and pipe. Inventory raw materials, waste, and other materials which are stored on site for longer than two weeks. Regularly check for collected water. Water that has collected in containers on a business storage yard or industrial complex will suffice as a suitable location for mosquitoes to lay eggs.

Mosquito breeding sites have been identified by LLCHD in glass, plastic, wood and metal containers. The composition of the container is not important. How long the container holds water is: one week is all that is needed for mosquitoes to complete their life cycle. Prompt removal of by-products, recyclables and wastes reduces the likelihood of mosquito breeding.

Depressions in the ground made by heavy equipment or trucks that fill with water after a rain or flooding can be excellent, temporary breeding grounds. If possible, level or fill in these areas to reduce standing water.



During summer months, mosquitoes prefer to lay eggs in cooler, shaded areas. The north and east sides of buildings, trees, and large accumulations of materials create shade and protection to containers holding water within piles of tires, metal and waste products. These are ideal conditions for mosquito breeding. Materials that collect water and cannot be stored indoors may need to be treated to prevent mosquito breeding. Contact LLCHD for treatment options.



Keep vegetation mowed along fence lines, around equipment and material stockpiles. Weeds and volunteer trees provide protection from summer sun for mosquitoes. Workers that disturb or are near these resting places will be at risk for mosquito bites. Do not allow your worksite to spread mosquito-borne disease to your workers.



The LLCHD conducted a medical survey of individuals in Lancaster County with West Nile Disease following the 2003 outbreak. The survey revealed that those with the more severe type of West Nile disease were still suffering debilitating symptoms months later, losing valuable time from work. Also, when able to return to work, some were only able to work part-time until a full recovery was made which in some cases was up to one year later.



PROTECT YOURSELF AND YOUR FAMILY FROM MOSQUITOES

Wear light colored clothing. Wear long-sleeved shirts and long pants made of woven materials that are thick enough to keep mosquitoes from biting through.

Anyone working outdoors where mosquitoes are known to be found should be encouraged to wear insect repellent. Apply insect repellent as indicated on the repellent label. Over applying repellent does not increase protection time. Apply sparingly to exposed skin and over clothing.

The most effective repellents contain DEET. Products containing 30% DEET will provide up to 6 hours of

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Toxic Release Inventory:

MORE GOOD NEWS FOR LINCOLN AND LANCASTER COUNTY

The last issue of *The ETHIC* contained an article discussing the Toxics Release Inventory (TRI) report showing that local businesses reduced emissions and releases of hazardous chemicals over the past 20 years. The 2003 data are now available from the Environmental Protection Agency (EPA).

According to the EPA's *Release of Key Findings*, "[T]he amount of toxic chemicals released into the environment by reporting facilities continues to decline, with total reductions of 42 percent since 1998 and a six percent decrease from 2002 to 2003." Releases in 2003 were about 400,000 pounds lower in Lancaster County—a 23% decrease.



The report describes the Toxic Release Inventory:

The United States (U.S.) Environmental Protection Agency (EPA) Toxics Release Inventory (TRI) program collects information on the disposal or other releases and other waste management activities for over 650 chemicals from industrial sources in all 50 states and the U.S. territories. The information has been collected annually since 1987. . . .

The 2003 TRI data are now available online in a searchable, sortable format at <http://www.epa.gov/triexplorer>. We invite you to visit our web site and explore the data to learn more about toxic chemical releases and waste management activities across the U.S., by state, county or even zip code . . .

Federal regulations, notably the Emergency Planning and Community Right to Know Act of 1986 and the Pollution Prevention Act of 1990, require that businesses and government agencies make the information obtained from this report available to the public. Responders need to know what is on site when there is an emergency in order to control the situation and save lives.

By reducing the emissions of toxic chemicals, businesses protect their workers and the families that live, work, and play nearby. Businesses reduce the costs associated with waste and liability while protecting human health and the environment.

For more information visit: <http://www.epa.gov/tri/tridata/tri03/index.htm>.



Healthy Employees, Customers, Environment



Your business can reduce health care costs by promoting healthy activities among employees. You can also promote healthy activities among customers. Promoting healthy activities creates goodwill and protects the environment.

Provide bike racks for customers and employees. Some businesses have showers and changing rooms. Some down town businesses have contracted with the YMCA and the YWCA so employees can use their showers and locker rooms.

In New York City, businesses worked with city transportation officials to offer special bus passes. Businesses validate the pass, much like a park-and-shop coupon. The customer or employee receives a discount on bus tickets.

For other ideas about what your business might do to promote worker and customer health, contact the LLCHD WorkWell program (441-8049) and Health Promotion Outreach (441-8045).



PROTECT YOURSELF (CONTINUED FROM PAGE 2)

protection. The Centers for Disease Control and Prevention (CDC) also recommends repellents containing picaridin and oil of eucalyptus as alternatives to DEET products. Picaridin and oil of eucalyptus provide protection times of up to 90 minutes without the discomfort caused by DEET products.



Other alternative repellents made from plant oils such as birch, bluestem grass, geranium, pine, rosemary, spearmint, yarrow, lantana, neem, and soybean may provide some degree of protection, but are not endorsed by CDC. These generally are home made mixtures. Some body lotions, such as Avon Skin-So-Soft, offer a degree of protection from mosquito bites. Materials that form protective layers on the skin must be reapplied frequently, sometimes as often as every 30 minutes.

Stronger repellents containing permethrin can be applied to clothing to provide even longer protection. Repellents containing permethrin should never be applied to exposed skin. To apply permethrin correctly, hang clothing from a clothes line, spray product thoroughly over clothing and allow to dry before wearing. Clothing impregnated with permethrin are also available providing protection even after several machine washings.

Replace your outdoor lights with yellow “bug” lights. The yellow color is less attractive to insects.

What Does Not Work

According to the University of California (<http://www.ipm.ucdavis.edu/PMG/PESTNOTES/pn7451.html>):

There is a vast array of other products marketed to repel mosquitoes, most of which are ineffective. These include wrist bands that contain an aromatic repellent, ultrasonic emitters, electric grids, electronic repellers, aromatic plants (the most common one is the so-called mosquito plant, *Pelargonium x citrosum*), incense coils, vitamins



(B¹), and mixtures of brewer’s yeast and garlic. Researchers have shown that all these methods are of little or no value in repelling mosquitoes. Oil of citronella, which is extracted from *Andropogon nardus*, has long been claimed to repel mosquitoes. Burning citronella candles or mosquito coils works best if there is relatively little

air movement, but these products are only for use outdoors, which makes them mostly worthless. Electric bug zappers that are used to kill pest insects are counterproductive in two ways. The zappers attract more insects than they kill and many of the insects killed by these traps are those that prey on mosquitoes.

Even more advanced mosquito traps available have limited success. Placement of the traps, wind direction and number of mosquitoes present affect the trap’s benefit. A review of mosquito traps is available from LLCHD upon request.

For more information visit:

<http://www.epa.gov/pesticides/factsheets/mosquito.htm>

<http://www.annals.org/cgi/content/full/128/11/93>

<http://www.idph.state.il.us/public/hb/hbmosquito.htm>



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<http://www.lincoln.ne.gov/city/health/envIRON/pollu/>

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For more information or for P2 technical assistance, call 441-8040.

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